M7NCG BIOS Setup

BIOS Setup

Introduction

This manual discussed Award™ Setup program built into the ROM BIOS. The Setup program allows users to modify the basic system configuration. This special information is then stored in battery-backed RAM so that it retains the Setup information when the power is turned off.

The Award BIOS™ installed in your computer system's ROM (Read Only Memory) is a custom version of an industry standard BIOS. This means that it supports AMD K7 processor input/output system. The BIOS provides critical low-level support for standard devices such as disk drives and serial and parallel ports.

Adding important has customized the Award BIOS™, but nonstandard, features such as virus and password protection as well as special support for detailed fine-tuning of the chipset controlling the entire system.

The rest of this manual is intended to guide you through the process of configuring your system using Setup.

Plug and Play Support

These AWARD BIOS supports the Plug and Play Version 1.0A specification. ESCD (Extended System Configuration Data) write is supported.

EPA Green PC Support

This AWARD BIOS supports Version 1.03 of the EPA Green PC specification.

APM Support

These AWARD BIOS supports Version 1.1&1.2 of the Advanced Power Management (APM) specification. Power management features are implemented via the System Management Interrupt (SMI). Sleep and Suspend power management modes are supported. Power to the hard disk drives and video monitors can be managed by this AWARD BIOS.

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PCI Bus Support

This AWARD BIOS also supports Version 2.1 of the Intel PCI (Peripheral Component Interconnect) local bus specification.

DRAM Support

DDR SDRAM (Double Data Rate Synchronous DRAM) are supported.

Supported CPUs

This AWARD BIOS supports the AMD® K7 CPU.

Using Setup

In general, you use the arrow keys to highlight items, press <Enter> to select, use the <PgUp> and <PgDn> keys to change entries, press <F1> for help and press <Esc> to quit. The following table provides more detail about how to navigate in the Setup program by using the keyboard.

Keystroke	Function
Up arrow	Move to previous item
Down arrow	Move to next item
Left arrow	Move to the item on the left (menu bar)
Right arrow	Move to the item on the right (menu bar)
Move Enter	Move to the item you desired
PgUp key	Increase the numeric value or make changes
PgDn key	Decrease the numeric value or make changes
+ Key	Increase the numeric value or make changes
- Key	Decrease the numeric value or make changes
Esc key	Main Menu – Quit and not save changes into CMOS Status Page Setup Menu and Option Page Setup Menu – Exit Current page and return to Main Menu
F1 key	General help on Setup navigation keys
F5 key	Load previous values from CMOS
F7 key	Load the optimized defaults
F10 key	Save all the CMOS changes and exit

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1 Main Menu

Once you enter Award BIOS™ CMOS Setup Utility, the Main Menu will appear on the screen. The Main Menu allows you to select from several setup functions. Use the arrow keys to select among the items and press <Enter> to accept and enter the sub-menu.

!! WARNING !!

The information about BIOS defaults on manual (**Figure 1,2,3,4,5,6,7,8,9**) is just for reference, please refer to the BIOS installed on board, for update information.

■ **Figure 1. Main Menu**

```
                Phoenix - AwardBIOS CMOS Setup Utility

  ► Standard CMOS Features         Load Optimized Defaults

  ► Advanced BIOS Features         Set Supervisor Password

  ► Advanced Chipset Features      Set User Password

  ► Integrated Peripherals         Save & Exit Setup

  ► Power Management Setup          Exit Without Saving

  ► PnP/PCI Configurations         Upgrade BIOS

  ► PC Health Status

  Esc : Quit        F9 : Menu in BIOS      ↑ ↓ → ←   : Select Item
  F10 : Save & Exit Setup

                Time, Date, Hard Disk Type...
```

Standard CMOS Features

This submenu contains industry standard configurable options.

Advanced BIOS Features

This submenu allows you to configure enhanced features of the BIOS.

Advanced Chipset Features

This submenu allows you to configure special chipset features.

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Integrated Peripherals

This submenu allows you to configure certain IDE hard drive options and Programmed Input/ Output features.

Power Management Setup

This submenu allows you to configure the power management features.

PnP/PCI Configurations

This submenu allows you to configure certain "Plug and Play" and PCI options.

PC Health Status

This submenu allows you to monitor the hardware of your system.

Load Optimized Defaults

This selection allows you to reload the BIOS when the system is having problems particularly with the boot sequence.   These configurations are factory settings optimized for this system. A confirmation message will be displayed before defaults are set.

```
Load Optimized Defaults (Y/N)? N
```

Set Supervisor Password

Setting the supervisor password will prohibit everyone except the supervisor from making changes using the CMOS Setup Utility.   You will be prompted with to enter a password.

```
Enter Password:
```

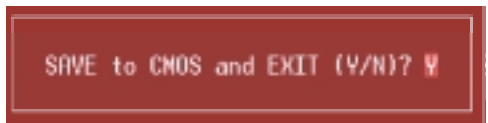# M7NCG BIOS Setup

Set User Password

If the Supervisor Password is not set, then the User Password will function in the same way as the Supervisor Password.   If the Supervisor Password is set and the User Password is set, the "User" will only be able to view configurations but will not be able to change them.

```
Enter Password:
```

Save & Exit Setup

Save all configuration changes to CMOS(memory) and exit setup. Confirmation message will be displayed before proceeding.

```
SAVE to CMOS and EXIT (Y/N)? Y
```

Exit Without Saving

Abandon all changes made during the current session and exit setup.   confirmation message will be displayed before proceeding.

```
Quit Without Saving (Y/N)? N
```

Upgrade BIOS

This submenu allows you to upgrade bios.

```
BIOS UPDATE UTILITY (Y/N)? N
```

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2 Standard CMOS Features

The items in Standard CMOS Setup Menu are divided into 10 categories. Each category includes no, one or more than one setup items. Use the arrow keys to highlight the item and then use the<PgUp> or <PgDn> keys to select the value you want in each item.

■ **Figure 2. Standard CMOS Setup**
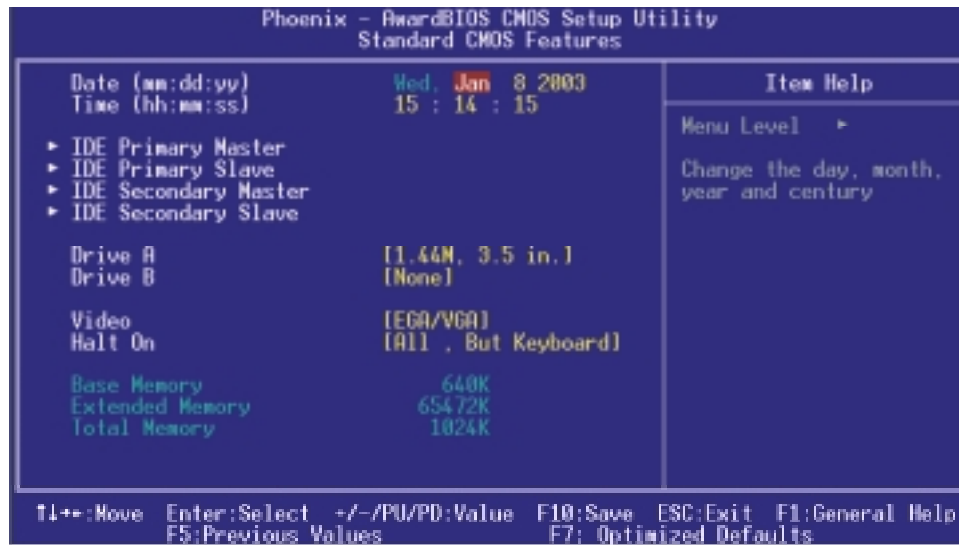
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Main Menu Selections

This table shows the selections that you can make on the Main Menu.

| Item	Options	Description
Date	mm : dd : yy	Set the system date. Note that the 'Day' automatically changes when you set the date.
Time	hh : mm : ss	Set the system internal clock.
IDE Primary Master	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options
IDE Primary Slave	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
IDE Secondary Master	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
IDE Secondary Slave	Options are in its sub menu.	Press <Enter> to enter the sub menu of detailed options.
Drive A Drive B	360K, 5.25 in 1.2M, 5.25 in 720K, 3.5 in 1.44M, 3.5 in 2.88M, 3.5 in None	Select the type of floppy disk drive installed in your system.
Video	EGA/VGA CGA 40 CGA 80 MONO	Select the default video device.

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Item	Options	Description
Halt On	All Errors No Errors All, but Keyboard All, but Diskette All, but Disk/ Key	Select the situation in which you want the BIOS to stop the POST process and notify you.
Base Memory	N/A	Displays the amount of conventional memory detected during boot up.
Extended Memory	N/A	Displays the amount of extended memory detected during boot up.
Total Memory	N/A	Displays the total memory available in the system.

3 Advanced BIOS Features

■ **Figure 3. Advanced BIOS Setup**
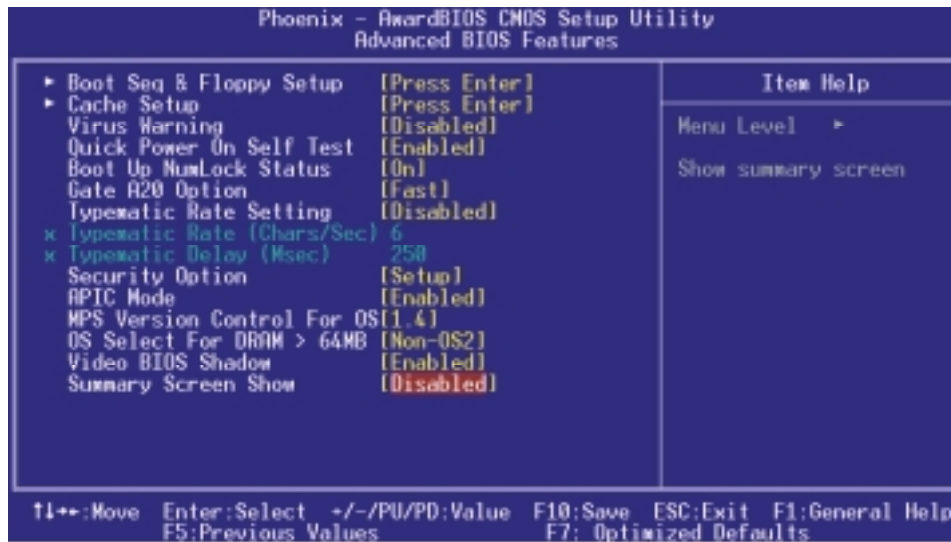
Boot Seq & Floppy Setup

       First/ Second/ Third/ Boot Other Device
       These BIOS attempt to load the operating system from the device in the sequence
       selected in these items.
       The Choices: Floppy, LS120, HDD-0, SCSI, CDROM, HDD-1, HDD-2, HDD-3,
       ZIP100, LAN, HPT370, Disabled, Enabled.

       Swap Floppy Drive
       For systems with two floppy drives, this option allows you to swap logical drive
       assignments.
       The Choices: Disabled (default), Enabled.

       Boot Up Floppy Seek
       Enabling this option will test the floppy drives to determine if they have 40 or 80
       tracks. Disabling this option reduces the time it takes to boot-up.
       The Choices: Disabled, **Enabled** (default).

Cache Setup

CPU Internal Cache

Depending on the CPU/chipset in use, you may be able to increase memory access time with this option.

The Choices:

Enabled (default)	Enable cache.
Disabled	Disable cache.

External Cache

This option you to enable or disable "Level 2" secondary cache on the CPU, which may improve performance.

The Choices:

Enabled (default)	Enable cache.
Disabled	Disable cache.

Virus Warning

This option allows you to choose the Virus Warning feature that is used to protect the IDE Hard Disk boot sector. If this function is enabled and an attempt is made to write to the boot sector, BIOS will display a warning message on the screen and sound an alarm beep.

Disabled (default)	Virus protection is disabled.
Enabled	Virus protection is activated.

Quick Power On Self Test

Enabling this option will cause an abridged version of the Power On Self-Test (POST) to execute after you power up the computer.

Enabled (default)	Enable quick POST.
Disabled	Normal POST.

Boot Up NumLock Status

Selects the NumLock. State after power on.

On (default)	Numpad is number keys.
Off	Numpad is arrow keys.

Gate A20 Option

Select if chipset or keyboard controller should control Gate A20.

Normal	A pin in the keyboard controller controls Gate A20.
Fast (default)	Lets chipset control Gate A20.

Typematic Rate Setting

When a key is held down, the keystroke will repeat at a rate determined by the keyboard controller. When enabled, the typematic rate and typematic delay can be configured.

The Choices: Disabled (default), Enabled.

Typematic Rate (Chars/Sec)

Sets the rate at which a keystroke is repeated when you hold the key down.
The Choices: 6 (default)**,** 8,10,12,15,20,24,30.

Typematic Delay (Msec)

Sets the delay time after the key is held down before it begins to repeat the keystroke.
The Choices: 250 (default)**,** 500,750,1000.

Security Option

This option will enable only individuals with passwords to bring the system online and/or to use the CMOS Setup Utility.

System	A password is required for the system to boot and is also required to access the Setup Utility.
Setup (default)	A password is required to access the Setup Utility only.

This will only apply if passwords are set from the Setup main menu.

APIC Mode

By selecting Enabled enables ACPI device mode reporting from the BIOS to the operating system.
The Choices: Enabled (default), Disabled.

MPS Version Control For OS

The BIOS supports version 1.1 and 1.4 of the Intel multiprocessor specification.
Select version supported by the operation system running on this computer.
The Choices: 1.4 (default), 1.1.

OS Select For DRAM > 64MB

A choice other than Non-OS2 is only used for OS2 systems with memory exceeding 64MB.
The Choices: Non-OS2 (default), OS2.

Video BIOS Shadow

Determines whether video BIOS will be copied to RAM for faster execution.
The Choices:

Enabled (default)	Optional ROM is enabled.
Disabled	Optional ROM is disabled.

Summary Screen Show

This item allows you to enable/ disable display the Summary Screen Show.
**The Choices: Disabled** (default), Enabled.

4 Advanced Chipset Features

This submenu allows you to configure the specific features of the chipset installed on your system. This chipset manage bus speeds and access to system memory resources, such as DRAM. It also coordinates communications with the PCI bus. The default settings that came with your system have been optimized and therefore should not be changed unless you are suspicious that the settings have been changed incorrectly.

■ **Figure 4. Advanced Chipset Setup**
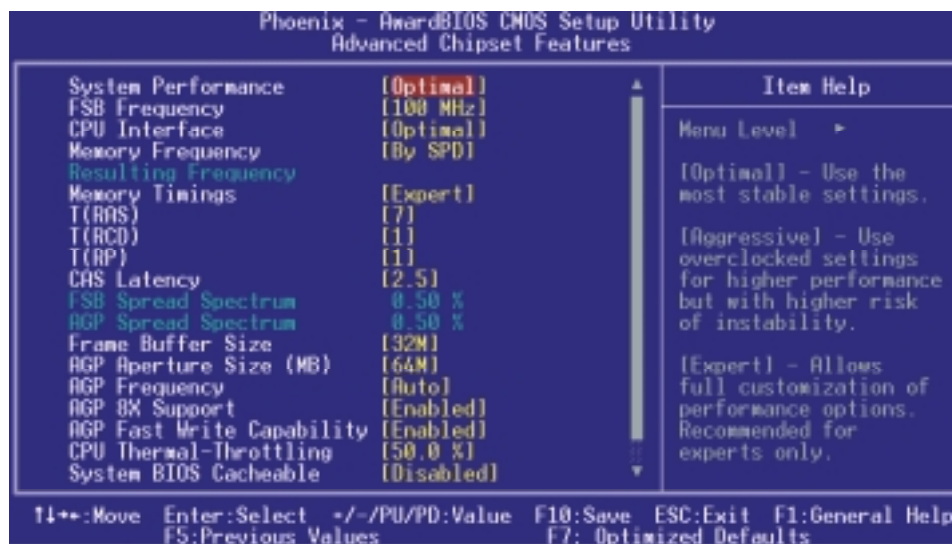
System Performance

> **Optimal** (Default)
> This item allows you to use the most stable settings.
>
> **Aggressive**
> This item allows you to use the overclocked settings for higher performance but with higher risk of inestability.
>
> **Expert**
> This item allows full customization of performance

FSB Frequency

This item allows you to select the FSB Frequency.
> **The Choices: 100MHz** (Default)

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CPU Interface

Optimal (Default)
This item allows you to use the most stable CPU/ FSB parameters.

Aggressive
This item allows you to use overclocked CPU/ FSB parameters.

Memory Frequency

Select "Auto" for best performance.
The Choices: By SPD (Default), 50%, 60%, 66%, 75%, 80%, 83%, 100%, 120%, 125%, 133%, 150%, 166%, 200%, Auto.

Memory Timings

Optimal (Default)
This item allows you to use the most stable settings.

Expert
This item allows you to enter timings manually.

T(RAS) (Row-active Delay)

This item allows you to set System Performance to "Optimal" to use the delay recommended by the DIMM's manufacturer.
The Choices: 7 (Default), 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15.

T(RCD) (RAS-to-CAS Delay)

This item allows you to set System Performance to "Optimal" to use the delay recommended by the DIMM's manufacturer.
The Choices: 1 (Default), 2, 3, 4, 5, 6, 7.

T (RP) (Row-precharge Delay)

This item allows you to set System Performance to "Optimal" to use the delay recommended by the DIMM's manufacturer.
The Choices: 1 (Default), 2, 3, 4, 5, 6, 7.

CAS Latency

This item allows you to set System Performance to "Optimal" to use the delay recommended by the DIMM's manufacturer.
The Choices: 2.5 (Default), 2.0, 3.0.

FSB Spread Spectrum

This item allows you to select the FSB Spread Spectrum.
The Choices: 0.50 (Default).

AGP Spread Spectrum

This item allows you to select the AGP Spread Spectrum.
The Choices: 0.50 (Default).

Frame Buffer Size

This item allows you to select the Frame Buffer Size.
The Choices: 32M (Default), 8M, 16M, 64M, 128M, Disabled.

AGP Aperture Size (MB)

Select the size of the Accelerated Graphics Port (AGP) aperture. The apertures is a portion of the PCI memory address range dedicated for graphics memory address space. Host cycles that hit the aperture range are forwarded to the AGP without any translation.
The Choices: 64 (default), 4, 8, 16, 32, 128, 256.

AGP Frequency

This item allows you to select the AGP Frequency.
The Choices: Auto (Default), 50MHz, 66MHz, 67MHz, 68MHz, 69MHz, 70MHz, 71MHz, 72MHz, 73MHz, 74MHz, 75MHz, 76MHz, 77MHz, 78MHz, 79MHz, 80MHz, 81MHz, 82MHz, 83MHz, 84MHz, 85MHz, 86MHz, 87MHz, 90MHz, 93MHz, 95MHz, 97MHz, 100MHz.

AGP 8X Support

This item allows you to enable or disable AGP 8X Support.
The Choices: Enabled (Default), Disabled.

AGP Fast Write Capability

This item allows you Enabled or Disabled AGP Fast Write Capability.
The Choices: Enabled (Default), Disabled.

CPU Thermal Throttling

This item allows you to select the CPU Thermal Throttling.
The Choices: 50% (Default), Disabled, 87.5%, 75%, 62.5%, 37.5%, 25%, 12.5%.

System BIOS Cacheable

Selecting Enabled allows you caching of the system BIOS ROM at F0000h~FFFFFh, resulting a better system performance. However, if any program writes to this memory area, a system error may result.
The Choices: Enabled, Disabled (default).

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<u>Video RAM Cacheable</u>

Enabling this option allows caching of the video RAM, resulting a better system performance. However, if any program writes to this memory area, a system error may result.

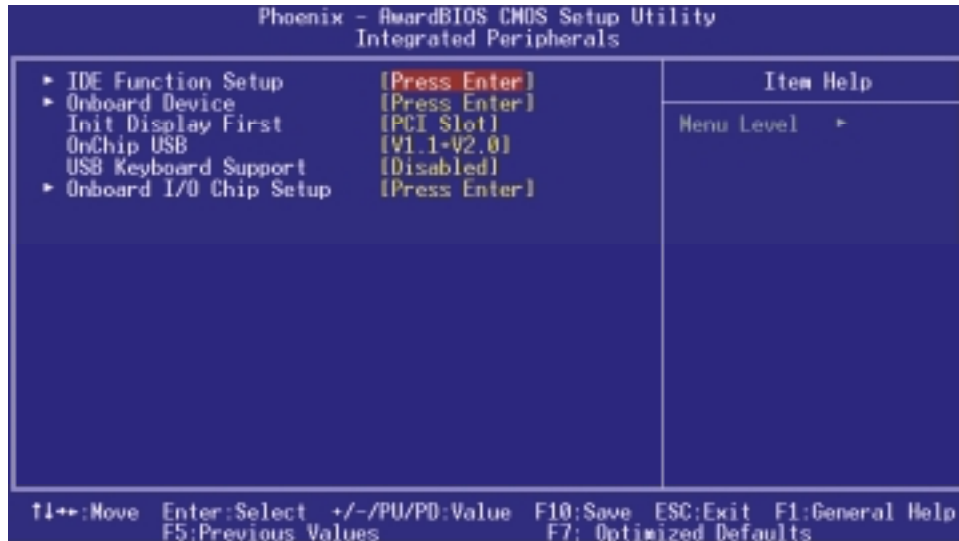**The Choices: Disabled** (default), Enabled.

<u>TV Mode Support</u>

This option allows you to decide whether or not to connect the computer with a television.

The Choices: Disabled (default), Enabled.

5 Integrated Peripherals

■ **Figure 5. Integrated Peripherals**

```
          Phoenix - AwardBIOS CMOS Setup Utility
                    Integrated Peripherals

 ▶ IDE Function Setup        [Press Enter]        Item Help
 ▶ Onboard Device            [Press Enter]
   Init Display First        [PCI Slot]         Menu Level    ▶
   OnChip USB                [V1.1+V2.0]
   USB Keyboard Support      [Disabled]
 ▶ Onboard I/O Chip Setup    [Press Enter]






 ↑↓→←:Move  Enter:Select  +/-/PU/PD:Value  F10:Save  ESC:Exit  F1:General Help
           F5:Previous Values        F7: Optimized Defaults
```

IDE Function Setup

The chipset contains a PCI IDE interface with support for two IDE channels.
Select "Enabled" to activate the first and / or second IDE interface. If you install a primary and / or secondary add-in IDE interface, select "Disabled" to deactivate an interface. If you highlight the literal "Press Enter" next to the "Onchip IDE Control" label and then press the enter key, it will take you a submenu with the following options:

OnChip IDE Channel 0/1
The motherboard chipset contains a PCI IDE interface with support for two IDE channels. Select "Enabled" to activate the first and/or second IDE interface. Select "Disabled" to deactivate an interface if you are going to install a primary and/or secondary add-in IDE interface.
The Choices: Enabled (default), Disabled.

IDE Primary / Secondary   Master / Slave PIO
The IDE PIO (Programmed Input / Output) fields let you set a PIO mode (0-4) for each of the IDE devices that the onboard IDE interface supports. Modes 0 through 4 provides successively increased performance. In Auto mode, the system automatically determines the best mode for each device.
The Choices: Auto (default), Mode0, Mode1, Mode2, Mode3, Mode4.

IDE Primary / Secondary   Master / Slave UDMA
Ultra DMA/100 functionality can be implemented if it is supported by the IDE hard drives in your system. As well, your operating environment requires a DMA driver (Windows 95 OSR2 or a third party IDE bus master driver). If your hard drive and your system software both support Ultra DMA/100, select Auto to enable BIOS support.
The Choices: Auto (default), Disabled.

IDE Prefetch Mode
The "onboard" IDE drive interfaces supports IDE prefetching for faster drive access.   If the interface does not support prefetching. If you install a primary and/or secondary add-in IDE interface, set this option to "Disabled".
The Choices: Enabled (default), Disabled.

IDE HDD Block Mode
Block mode is also called block transfer, multiple commands, or multiple sector read / write. If your IDE hard drive supports block mode (most new drives do), select Enabled for automatic detection of the optimal number of block mode (most new drives do), select Enabled for automatic detection of the optimal number of block read / write per sector where the drive can support.
The Choices: Enabled (default), Disabled.

Onboard Device

AC97 Audio
This item allows you to decide to enable/ disable to support AC97 Audio.
The Choices: Auto (default), Disabled.

AC97 Modem
This item allows you to decide to enable/ disable to support AC97 Modem.
The Choices: Auto (default), Disabled.

MAC LAN (nVIDIA)
This item allows you to select MAC LAN.
The Choices: Auto (Default), Disabled.

Machine MAC (NV) Address
This item allows you to enable or disable Machine MAC Address.
The Choices: Disabled (Default), Enabled.

Onchip 1394 Chip
This item allows you to set the Onchip 1394 Chip.
The Choices: Auto (Default), Disabled.

Init Display First

This item allows you to decide to active whether PCI Slot or on-chip VGA first.
The Choices: Onboard/AGP, **PCI Solt** (default).

OnChip USB

This item allows you to set the onchip USB.
The Choices: V1.1+V2.0 (default), Disabled, V1.1.

USB Keyboard Support

The default value is Disabled.

Enabled	Enable USB Keyboard Support.
Disabled (default)	Disable USB Keyboard Support.

Onboard I/O Chip Setup

Power On Function
This item allows you to choose the powen on function.
The Choices: Button only (default), Password, Hot Key, Mouse Left, Mouse Right, Any Key, Keyboard 98.

KB Power on Possword
Input password and press Enter to set the Keyboard power on password .

HOT Key power ON
Input password and press Enter to set the Keyboard power on password .
The Choices: Ctrl-F1(default) , Ctrl-F2 , Ctrl-F3 , Ctrl-F4 , Ctrl-F5,
Ctrl-F6 , Ctrl-F7 , Ctrl-F8 , Ctrl-F9, Ctrl-F10 , Ctrl-F11 , Ctrl-F12 .

Onboard FDC Controller
Select Enabled if your system has a floppy disk controller (FDC) installed on the system board and you wish to use it. If install and FDC or the system has no floppy drive, select Disabled in this field.
The Choices: Enabled (default), Disabled.

Onboard Serial Port 1
Select an address and corresponding interrupt for the first and second serial ports.
The Choices: 3F8/IRQ4 (default), Disabled, Auto, 2F8/IRQ3, 3E8/IRQ4, 2E8/IRQ3.

Onboard Serial Port2
Select an address and corresponding interrupt for the first and second serial ports.
The Choices: Disabled (default), 3F8/IRQ4, 2F8/IRQ3, 3E8/IRQ4, 2E8/IRQ3, Auto.

UART Mode Select
This item allows you to determine which Infra Red (IR) function of onboard I/O chip.
The Choices: Normal, ASKIR, **IrDA** (default).

RxD, TxD Active
This item allows you to determine which Infrared (IR) function of onboard I/O chip.
The Choices: Hi / Lo (default), Hi / Hi, Lo / Hi, Lo / Lo.

IR Transmission Delay
This item allows you to enable/disable IR transmission delay.
The Choices: Enabled (default), Disabled.

UR2 Duplex Mode
Select the value required by the IR device connected to the IR port. Full-duplex mode permits simultaneous two-direction transmission. Half-duplex mode permits transmission in one direction only at a time.
The Choices: Half (default), Full.

Use IR Pins
Consult your IR peripheral documentation to select the correct setting of the TxD and RxD signals.
The Choices: IR-Rx2Tx2 (default), RxD2, TxD2.

Onboard Parallel Port
This item allows you to determine access onboard parallel port controller with which I/O address.
The Choices: 378/IRQ7 (default), 278/IRQ5, 3BC/IRQ7, Disabled.

Parallel Port Mode
The default value is SPP.

SPP (default)	Using Parallel port as Standard Printer Port.
EPP	Using Parallel port as Enhanced Parallel Port.
ECP	Using Parallel port as Extended Capabilities Port
ECP+EPP	Using Parallel port as ECP & EPP mode.

EPP Mode Select
Select EPP port type 1.7 or 1.9.
The Choices: EPP 1.7(default), EPP1.9.

ECP Mode Use DMA
Select a DMA Channel for the port.
The Choices: 3 (default), 1.

Game Port Address
Game Port I/O Address.
The Choices: 201 (default), 209, Disabled.

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Midi Port Address
Midi Port Base I/O Address.
The Choices: 330 (default), 300, 290, Disabled.

Midi Port IRQ
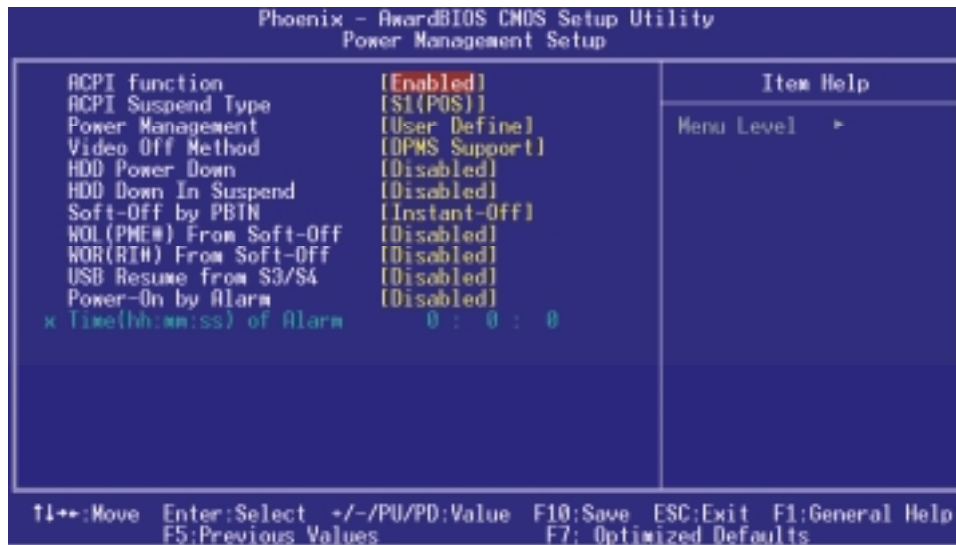This determines the IRQ in which the Midi Port can use.
The Choices: 10 (default), 5.

6 Power Management Setup

The Power Management Setup Menu allows you to configure your system to utilize energy conservation and power up/power down features.

■ **Figure 6. Power Management Setup**

ACPI function

This item displays the status of the Advanced Configuration and Power Management (ACPI).
>> **The Choices: Enabled** (default), Disabled.

ACPI Suspend Type

The item allows you to select the suspend type under the ACPI operating system.
>> **The Choices: S1 (POS)** (default)   Power on Suspend
>> S3 (STR)   Suspend to RAM
>> S1 & S3   POS+STR

Power Management

This category allows you to select the type (or degree) of power saving and is directly related to the following modes:
1.HDD Power Down.
2.Suspend Mode.

There are four options of Power Management, three of which have fixed mode settings

Min. Power Saving

Minimum power management.
Suspend Mode = 1 hr.
HDD Power Down = 15   min

Max. Power Saving

Maximum power management only available for sl CPU's.
Suspend Mode = 1 min.
HDD Power Down = 1 min.

User Defined (default)

Allows you to set each mode individually.
When not disabled, each of the ranges are from 1 min. to 1 hr. except for HDD
Power Down which ranges from 1 min. to 15 min. and disable.

Video Off Method

This option determines the manner in which the monitor is goes blank.

V/H SYNC+Blank

This selection will cause the system to turn off the vertical and horizontal
synchronization ports and write blanks to the video buffer.
Blank Screen

This option only writes blanks to the video buffer.

DPMS (default)

Initial display power management signaling.

HDD Power Down

When enabled, the hard disk drive will power down and after a set time of system inactivity.
All other devices remain active.
The Choices: Disabled (default), 1 Min, 2 Min, 3 Min, 4 Min, 5 Min, 6 Min, 7 Min,8 Min,
9 Min, 10 Min, 11 Min, 12 Min, 13 Min, 14 Min, 15Min.

HDD Down In Suspend

This item allows you to enable or disable HDD Down In Suspend.
The Choices: Disabled (Default), Enabled.

Soft-Off by PWR-BTTN

Pressing the power button for more than 4 seconds forces the system to enter the

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Soft-Off state when the system has "hung."
The Choices: Delay 4 Sec, **Instant-Off** (default).

WOL (PME#) From Soft-Off

This item allows you to enable or disable the WOL (PME#) From Soft-Off.
The Choices: Disabled (Default), Enabled.

WOR (RI#) From Soft-Off

This item allows you to enable or disable the WOR (RI#) From Soft-Off.
The Choices: Disabled (Default), Enabled.

USB Resume from S3/ S4

This item allows you to enable or disable USB Resume from S3/ S4.
The Choices: Disabled (Default), Enabled.

Power-On by Alarm

This item allows you to enable or disabled power on by alarm.
The Choices: Disabled (Default), Enabled.

7 PnP/PCI Configurations

This section describes configuring the PCI bus system. PCI, or Personal Computer Interconnect, is a system which allows I/O devices to operate at speeds nearing the speed of the CPU itself uses when communicating with its own special components. This section covers some very technical items and it is strongly recommended that only experienced users should make any changes to the default settings.

■ **Figure 7. PnP/PCI Configurations**
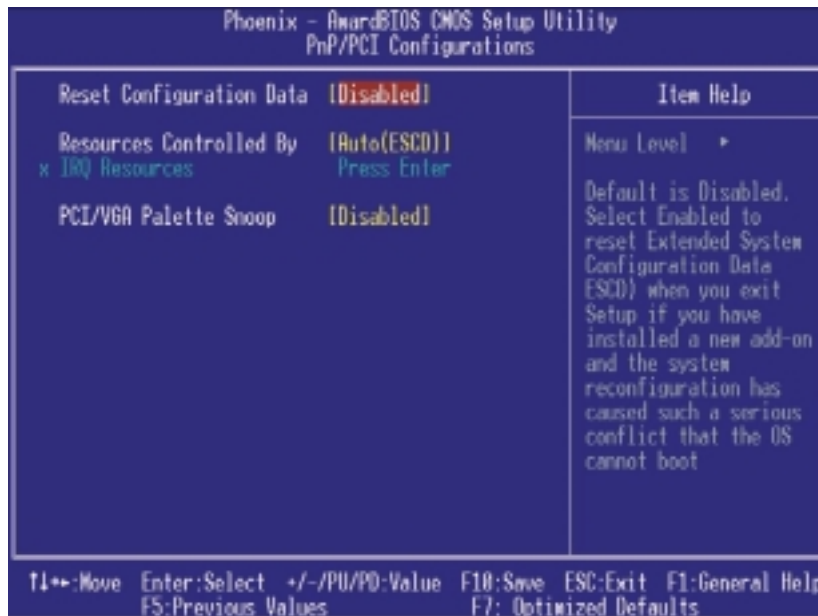
Reset Configuration Data

The system BIOS supports the PnP feature which requires the system to record which resources are assigned and protects resources from conflict.   Every peripheral device has a node, which is called ESCD.   This node records which resources are assigned to it.   The system needs to record and update ESCD to the memory locations.   These locations (4K) are reserved in the system BIOS. If the Disabled (default) option is chosen, the system's ESCD will update only when the new configuration varies from the last one. If the Enabled option is chosen, the system is forced to update ESCDs and then is automatically set to the "Disabled" mode.

The above settings will be shown on the screen only if "Manual" is chosen for the resources controlled by function.
Legacy is the term, which signifies that a resource is assigned to the ISA Bus and provides

non-PnP ISA add-on cards. PCI / ISA PnP signifies that a resource is assigned to the PCI Bus or provides for ISA PnP add-on cards and peripherals.

The Choices: Disabled (default), Enabled.

Resources Controlled By

By Choosing "**Auto(ESCD)**" (default), the system BIOS will detect the system resources and automatically assign the relative IRQ and DMA channel for each peripheral.By Choosing "Manual", the user will need to assign IRQ & DMA for add-on cards. Be sure that there are no IRQ/DMA and I/O port conflicts.

IRQ Resources

This submenu will allow you to assign each system interrupt a type, depending on the type of device using the interrupt. When you press the "Press Enter" tag, you will be directed to a submenu that will allow you to configure the system interrupts. This is only configurable when "Resources Controlled By" is set to "Manual".

IRQ-3	assigned to	PCI Device
IRQ-4	assigned to	PCI Device
IRQ-5	assigned to	PCI Device
IRQ-7	assigned to	PCI Device
IRQ-9	assigned to	PCI Device
IRQ-10	assigned to	PCI Device
IRQ-11	assigned to	PCI Device
IRQ-12	assigned to	PCI Device
IRQ-14	assigned to	PCI Device
IRQ-15	assigned to	PCI Device

PCI / VGA Palette Snoop

Choose Disabled or Enabled. Some graphic controllers which are not VGA compatible take the output from a VGA controller and map it to their display as a way to provide boot information and VGA compatibility.

However, the color information coming from the VGA controller is drawn from the palette table inside the VGA controller to generate the proper colors, and the graphic controller needs to know what is in the palette of the VGA controller. To do this, the non-VGA graphic controller watches for the Write access to the VGA palette and registers the snoop data. In PCI based systems, where the VGA controller is on the PCI bus and a non-VGA graphic controller is on an ISA bus, the Write Access to the palette will not show up on the ISA bus if the PCI VGA controller responds to the Write.

In this case, the PCI VGA controller should not respond to the Write, it should only snoop the data and permit the access to be forwarded to the ISA bus. The non-VGA ISA graphic controller can then snoop the data on the ISA bus. Unless you have the above situation, you should disable this option.

Disabled (default)	Disables the function.
Enabled	Enables the function.

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8 PC Health Status

■ **Figure 8. PC Health Status**
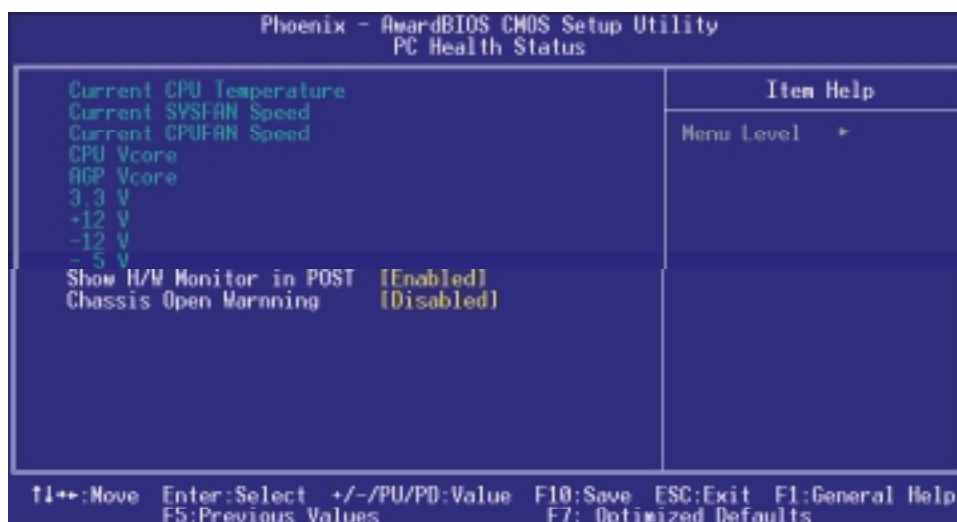
<u>**Current CPU Temperature**</u>

Show you the current CPU temperature.

<u>**Current SYSFAN Speed**</u>

This field displays the current SYSFAN speed.

<u>**Current CPUFAN Speed**</u>

This field displays the current CPUFAN speed.

<u>**CPU Vcore/AGP Vcore/AGP Voltage/+3.3V/+12V/-12V/-5V**</u>

Detect the system's voltage status automatically.

<u>**Show H/W Monitor in POST**</u>

If you computer contain a monitoring system, it will show PC health status during POST stage. The item offers several delay time to select you want.
The Choices: Enabled (default), Disabled.

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<u>Chassis Open Warning</u>

This item allows you to enable or disable Chassis Open Warning beep.
The Choices: Disabled (Default), Enabled.